



## Evolution of a Natural Health Products Curriculum: from “weeds and seeds” to integrative therapy

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## History of Natural Health Products in the Dalhousie College of Pharmacy Curriculum

- 1900s-1980s Pharmacognosy
- 1980s-1990s Elective course in Herbal Medicine
- 1997-current NHPs are compulsory content in:
  - Problem based learning curriculum (PBL)
  - Critical Appraisal Series (CAS)
  - Skills lab

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## Factors influencing decision to integrate NHPs into curriculum

- Increase in use of NHPs
- Most consumers buy NHPs from pharmacies
- New NHP Regulations in Canada

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## Nova Scotia College of Pharmacists Policies, Positions and Guidelines for the Sale of Natural Health Products in Pharmacies

- The pharmacist shall have a **general knowledge of natural health products.**
- The pharmacist shall have a current, reliable reference.
- The pharmacist shall be satisfied that the products have been approved for sale by Health Canada and have been assigned an NPN or DIN-HM designation.
- **When counseling, the pharmacist shall be satisfied that the product(s) will not interfere/interact with the patient's possible disease state and/or other traditional medications.**
- When counseling, the pharmacist shall be satisfied that the patient understands that the product is not to be used as an alternative to his/her traditional therapy, unless so directed by his/her physician.
- When counseling, the pharmacist shall encourage the patient to inform his/her physician of the decision to try new therapy.
- The pharmacist shall recognize the need for intervention and/or referral to a physician.

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## Natural Health Products in the Dalhousie College of Pharmacy Curriculum

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  - Skills lab

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## Sources of Information on Natural Health Products

Phar 2010  
October 18, 2012  
Dr. T. Jurgens

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## Integrating NHPs into PBL curriculum

### PHAR 3020 (Women's health)

- Case 1 Contraception (OTC)
- Case 2 Contraception (COCs)
- Case 3 Menopause/Osteoporosis
- Case 4 Premenstrual Syndrome/Dysmenorrhea

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## NHPs and problem-based learning

1. Are there any NHPs that a patient might use to **treat/prevent** this disease?
2. Are there any NHPs that a patient with this disease **should avoid**?

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## NHPs and menopause

PBL Case on Menopause (2000)

### Day 1, Page 2:

After learning more about menopause and Hormone Replacement Therapy, Emily looks a little overwhelmed. She asks if there is any “non-hormonal” therapy that can be used to manage short-term symptoms of menopause. **She also notices the display of natural therapies you have with you and asks if any of them are good for menopause.**

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## NHPs and menopause

PBL Case on Menopause (2000)

**Guiding question 1. What herbal medicines are available in pharmacies** for use in the treatment of the symptoms of menopause?

**Guiding question 2. Are they effective?**

**Guiding question 3. Are they safe** when used alone or in combination with other treatments?

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## NHPs and menopause

### What we learned:

1. It was a potentially overwhelming workload to be accomplished in 48 h
2. Students had difficulty identifying which NHPs to focus on
3. Students were not confident in synthesizing “clinically relevant” information

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## NHPs and menopause

### How we responded:

1. Made learning objectives more specific.  
Ex. Evaluate the use of herbal medicines such as: black cohosh, Dong quai, ginseng, evening primrose oil, soy in the treatment of menopause.
2. Collected student learning issues and addressed deficiencies in lecture.
3. Used lecture time to discuss more difficult concepts, NHPs with questionable evidence etc.

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## NHPs and menopause

PBL Case on Menopause (2012)

### Day 1, Page 2:

After all this information about hormone therapy Emily looks a little overwhelmed. **She says she noticed that 2 natural products, black cohosh and Promensil were advertised today in one of the display booths and wonders if either of them would work for her.**

**Guiding Question.** What natural product (black cohosh or Promensil) or “non-hormonal” therapy can be used to manage the short-term symptoms of menopause? Can she take one product to control both her hot flashes and vaginal dryness?

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## NHPs and menopause

PBL Case on Menopause (2012)

### Day 1, Page 3

After learning about the natural products, Emily is very excited and would like you to recommend one for her hot flashes.

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## NHPs and menopause

Drug/Route/Formulation/Dose/Frequency		Duration
black cohosh 40-80 mg twice daily (standardized 1mg 27-deoxyaceticin/20mg tab)		6 months
Monitoring: Benefits		Monitoring: Harms
relief of the hot flashes		- persistence of hot flashes - intolerable adverse effects
What to Monitor	Who will Monitor	Length of Monitoring
compliance	patient, pharmacist	duration of therapy
relief of symptoms	patient, pharmacist	hot flashes should be relieved -perhaps 4-6 weeks

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## NHPs and drug therapy

PBL Case on Contraception (2012)

### Day 1, Page 3

“When Tonya comes into the pharmacy for her sixth package of pills, she mentions that she has been **“bleeding outside of her normal time.... Is this breakthrough bleeding or spotting? What should she do? Does that mean the pill is not effective? Upon further questioning she says she has been taking St. John's wort for about 3 months for mood and occasionally takes valerian for sleep”**

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## Lessons Learned

1. Having students learn about NHPs in an integrated manner gets them used to thinking about them that way.
2. Being directive in the case allows students to focus efforts on learning about common NHPs and gain confidence in appraising NHP literature.
3. Lecture is best place to discuss more challenging concepts, uncertain evidence.

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## Conclusion

- The overall use of NHPs remains steady, however use pattern changes.
- All pharmacists must be comfortable knowing where to obtain and how to evaluate literature about new/unusual NHPs
- Learning about NHPs along with other therapies for a particular condition has been an effective strategy at Dalhousie.